

ACCURATE POWER DETECTION FOR A MULTI-STAGE AMPLIFIER

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Li Liu
Christopher C. Souchuns
Ping Li
Gregory N. Henderson

ABSTRACT

A multi-stage amplifier is coupled with a power detector. The multi-stage amplifier includes a plurality of amplifier stages in series, with a signal path extending through them.

10 The power detector is coupled to an interior node of the amplifier along the signal path, and is operable to sample a first signal being transmitted on the signal path. The power detector outputs a second signal reflective of a power of the first signal. In one embodiment, the interior node is in a matching network of the amplifier disposed between a first amplifier stage and a final amplifier stage of the amplifier. The second signal may be used in a
15 feedback network to adjust an amount of amplification of the first signal by the amplifier.